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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,504	08/14/2001	Penny J. Heeren	10692/5	2077

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EXAMINER	
VU, TUAN A	

ART UNIT	PAPER NUMBER
2124	

DATE MAILED: 09/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/930,504	HEEREN ET AL.	
	Examiner	Art Unit	
	Tuan A Vu	2124	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 August 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 August 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *20021125, 20030616*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed August 14, 2001.

Claims 1-29 have been submitted for examination.

Drawings

2. The drawings are objected to because of the following:

In Fig. 4, block 68, the element 'TEMPLE, XML' appears to be a typo error and should be corrected to be 'TEMPLATE.XML'

For Figures 4 and 5, the 'FIG. 4' and 'FIG. 5' labels are not spaced sufficiently in the layout for distinctly separate the 2 respective drawings as displayed in one page.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claims 8, 12, 13, 19, 22 and 23 are objected to because of the following informalities: the subparagraph marking using alphabet labels (in parentheses) are not providing uniqueness in the subdivision of claims, i.e. the same alphabet labels (e.g. '(c)' for claims 8, 12, 13; and '(d)' for claims 19, 22, 23) are being repeated with respect the same base claim whereas they have to be formed with a new alphabet letter each time. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-10, 12-15, 17-20, 22-23, and 25-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Okita et al., USPN: 6,243,092 (hereinafter Okita).

As per claim 1, Okita discloses a method for generating a call flow script, the method comprising:

visually programming call flow information (e.g. *primitives, AWE* – col. 4, line 64 to col. 5, line 13; col. 11, lines 50-52); and

converting the visually programmed call flow information to code for a presentation program (e.g. *main program* – Fig. 3; *DLL* – col. 5, lines 42-57) with a processor in response to a conversion program.

As per claim 2, Okita discloses a flow chart (e.g. *model 304* – Fig. 3; *workflow* – col. 20, lines 50-51; Fig. 13-16).

As per claim 3, Okita discloses inserting first text, second text and third text and linking these with links (e.g. Fig. 3-4 – Note: primitives associated with inherent definition every representation object of a workflow as modeled is equivalent to text data).

As per claim 4, Okita discloses query response associated with a link in a work flow or flow chart or call flow (Fig. 6, 8, 13-16 – Note: IF/THEN Statements and DB queries involved in

object linking of a flow diagram implicitly discloses definition message communication and exchange of data between objects in flow, i.e. query response with a link)

As per claims 5 and 6, Okita discloses selecting an object and a control option (Balance>1000000 – Fig. 14; *CASE steps* – col. 12, lines 25-36).

As per claim 7, Okita discloses adding call flow query and link to the visually programmed call flow information (e.g. Fig. 3; local storage *210* – col. 5, lines 8-16)

As per claim 8, Okita discloses converting code for the presentation program to a visual call flow chart with a processor (e.g. *transaction processing system* – col. 21, line 48 to col. 22, line 20 – Note: accessing modeling data in storage device - see Fig. 3 - to render a visual transaction flow in order to attest to its validity for corrective edition purposes reads on having executable code to convert the presentation program into a visual call flow chart)

As per claim 9, Okita discloses identifying queries and at least one link associated with each of the queries (Note: in light of the teachings as mentioned in claim 3 and 4, the acts of identifying and analyzing for query response by means of the rendered visual call flow as in claim 8 are disclosed, particularly in conjunction with Fig. 17 when error checking of the flow chart implicitly teaches identifying queries associated with links).

As per claim 10, Okita does not explicitly disclose converting a flow chart into a linking display code; but according to the reconstructing of a call flow display for error checking and re-editing as in Fig. 17, a code or linking display code being generated translating the call processing model information from Fig. 3 to executable in order to render the visual call flow as from Fig. 17, is implicitly disclosed.

As per claim 12, Okita discloses displaying of call flow script information in response to the code and presentation program (re rationale in claim 10).

As per claim 13, Okita does not explicitly disclose loading template and associated stencils formatted for use in the step of visually programming; but in view of the use of modeling tool using icon and text entering fields, split windows in the AWE (e.g. col. 7, line 7 to col. 9, line 67; *properties sheet*, col. 14, lines 48-53 – Note: stencil or boxes or fields for entering user's specification was known to come with modeling tool), this loading of templates or stencils would be equated to field and boxes for data specifying by AWE window; hence the limitation is disclosed.

As per claim 14, see Okita (e.g. *main program* - Fig. 3; *DLL* – col. 5, lines 42-57).

As per claim 15, the steps of identifying variables and coding links as a function of the possible values of the variables are implicitly disclosed in the creation of presentation program code as addressed in claim 1.

As per claim 17, Okita discloses a executable program in view of the reconstructing of a call flow display for error checking and re-editing as in Fig. 17, a code or linking display code being generated translating the call processing model information from Fig. 3 to executable in order to render the visual call flow.

As per claim 18, Okita discloses a method for generating a call flow script, the method comprising:

converting with a processor first computer data representing script in a call flow chart to script computer data formatted (e.g. *primitives, AWE* – col. 4, line 64 to col. 5, line 13; col. 11, lines 50-52; col. 7, line 7 to col. 9, line 67; *properties sheet*, col. 14, lines 48-53 – Note: text

entered by authoring tool during call flow modeling is equivalent to script computer data for linking software display of Fig. 17) for linking display software;

converting with the processor second computer data representing flow in a call flow chart to linking computer data formatted (*primitives, AWE* – col. 4, line 64 to col. 5, line 13; col. 11, lines 50-52; Fig. 13-16 – Note: link data from model form the formatted specification files or code underlying the authoring and modeling process by the AWE amounts to linking computer data formatted for linking software of Fig. 17) for the linking display software; and

associating the script computer data with the linking computer data (e.g. *main program* - Fig. 3; Fig. 17 – Note: the combining of textual specifications and graphical link data amounts to a program for reproducing call flow graph of Fig. 17 for re-editing purposes).

As per claim 19, Okita discloses generating call flow chart with visual programming software (e.g. *model 304* – Fig. 3; *workflow* – col. 20, lines 50-51; Fig. 13-16)

As per claim 20, this claim includes the selecting of object, and inserting of text and links to create the flow chart as recited in claims 5, 3, and 4; hence is rejected with the corresponding rationale as used therein respectively.

As per claim 22, Okita discloses displaying the script in a plurality of image and linking the images from the call flow chart as a function of the flow (e.g. *model 304* – Fig. 3; *workflow* – col. 20, lines 50-51; Fig. 13-16 – Note: each block being linked is equivalent to image, the linking is in accordance with the script information derived from the workflow modeling)

As per claim 23, Okita discloses

identifying script and flow of the call flow chart from data formatted for the visual programming software (e.g. col. 4, line 64 to col. 5, line 13; col. 11, lines 50-52; col. 7, line 7 to

col. 9, line 67; *properties sheet*, col. 14, lines 48-53 -Note: data underlying the modeling events are equivalent to data formatted for the visual programming software); and

converting from data formatted for the visual programming software to data formatted for the linking display software (e.g. col. 21, line 48 to col. 22, line 20; *client, DLL 308* – Fig. 3).

As per claim 25, Okita discloses a system for generating a call flow script, comprising:

a first computer for visually programming call flow information (e.g. *client 310* – Fig. 3; *primitives, AWE* – col. 4, line 64 to col. 5, line 13; col. 11, lines 50-52; col. 7, line 7 to col. 9, line 67) and for converting the visually programmed call flow information to code for a linking display program (e.g. *main program* - Fig. 3; *DLL* – col. 5, lines 42-57) in response to a conversion program; and

a plurality of computers each for displaying (e.g. col. 3, lines 33-45; Fig. 17; *transaction processing system* – col. 21, line 48 to col. 22, line 20) a plurality of script panels linked as a function of the call flow information.

As per claim 26, see Okita :col. 3, lines 33-45 (Note: transaction processing utility is equivalent to customer servicing agent or fucntionality)

As per claim 27, Okita discloses plurality of computers connected in a telephone system (e.g. Fig. 6, Fig. 13-16), and display associated with changing a status of a telephone connection (e.g. Fig. 12-17).

As per claim 28, refer to rationale as set forth in claim 17; and see Okita (*DLL 306, 308* – Fig. 3)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 11, 16, 21, 24, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okita et al., USPN: 6,243,092, as applied to claims 10, 1, 18, 23, 25 above, and further in view of Norton et al., USPN: 6,510,411(hereinafter Norton).

As per claim 11, Okita discloses a model with conversion utilities code (Fig. 3) hence has disclosed a conversion code provided to convert visual model data into a presentation program but does not disclose that such conversion results into a code of XML or HTML form. The conversion from user's specification using a modeling tool into a special form of definition file or configuration meta-programming language format specific to the integration environment of the tool was a well-known concept at the time the invention was made (e.g. VSD files for Visio Tool, XML for browser/JSP based tool, IDL files in Corba modeling, PBL files in PowerBuilder, MDL files in UML tool, cpp/h files in VisualStudio). In particular, the advantage of markup specification (e.g. extensible meta-language) was being acknowledged via it being increasingly used as universal language-translator. For instance, Norton, in a method to process and develop a call using a Interactive Voice Response system and modeling analogous to Okita, discloses interactive authoring with specification in XML code (col. 3, lines 25-38); hence has also disclosed macro processing by browser utilities when the XML files are parsed. In view of

the call processing or tele-communication paradigm and the multi-users network environment as mentioned by Okita (see col. 2, lines 5-8; Fig. 13-16), it would have been obvious for one of ordinary skill in the art at the time the invention was made to see to it that if the modeling tool is implemented in a network service operating in Web environment as suggested by Norton, the conversion code would be in XML and that browser macros (e.g. IE interpreter's API or embedded windows DLL routines) would be used to execute via parsing definition files created in XML or markup form as taught above because of the benefits associated with XML format specification in association with browser-based utilities/services (e.g. interpreter's routines) so that application data be more efficiently, inexpensively and securely propagated under the well-known and widely accepted HTTP/Web protocol.

As per claim 16, Okita does not expressly disclosed selecting a conversion macro but in view of the conversion tool that comes with a specific modeling tool as mentioned in claim 11 from above, the selection of a appropriate conversion code or macro as suggested by XML in Norton's modeling interface would also have been obvious for the same reasons as set forth in claim 11.

As per claim 21, this claim corresponds to the limitation of claim 11, hence is rejected with the corresponding rationale as set forth therein.

As per claims 24 and 29, these claims correspond to the limitation of claims 16 and 11, respectively, hence are rejected with the corresponding rationale as set forth therein.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (703)305-7207. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)

or: (703) 746-8734 (for informal or draft communications, please consult Examiner before using this number)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA. , 22202. 4th Floor(Receptionist).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VAT
September 2, 2004

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